20020701 162503T

FIG. 1

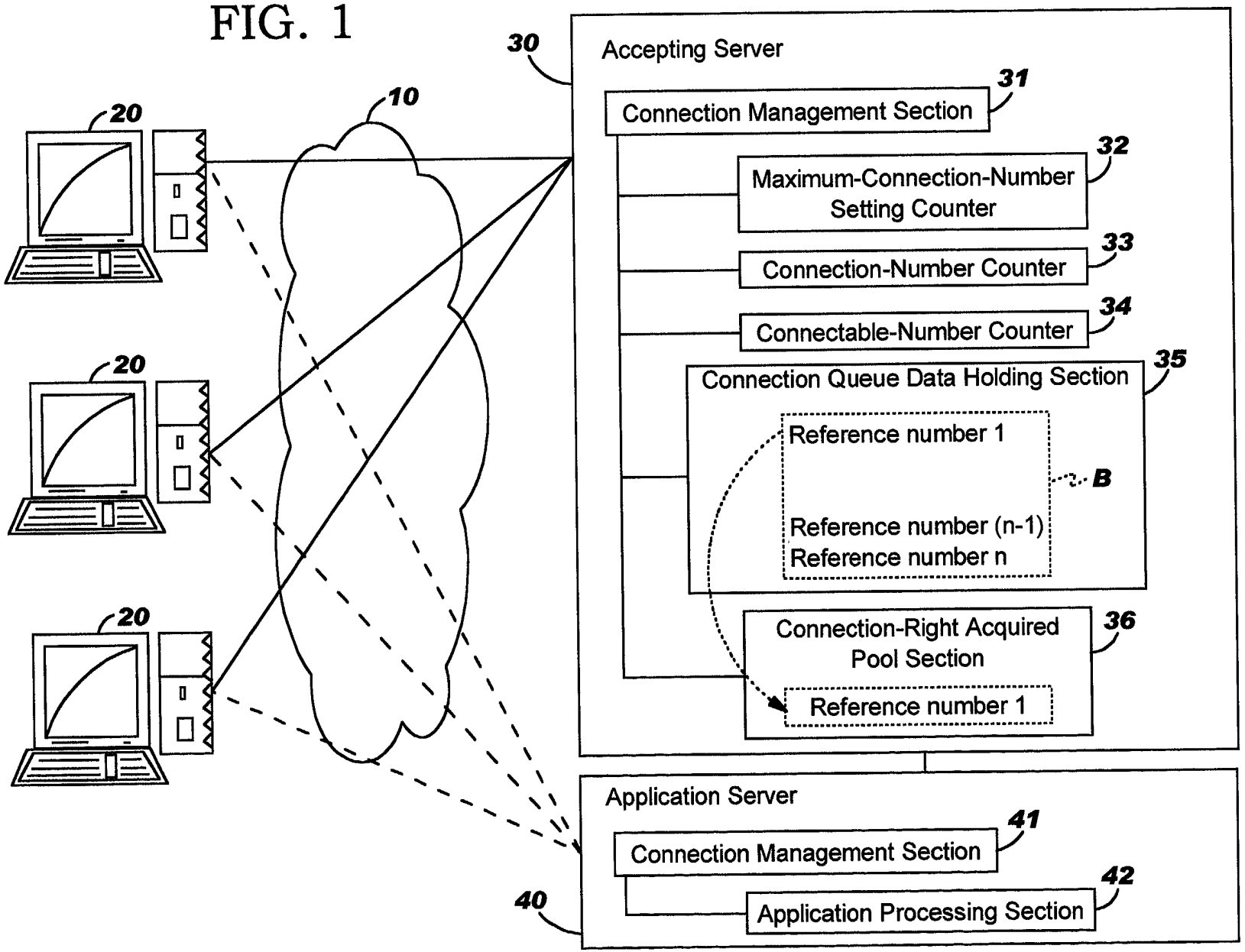

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FIG. 2

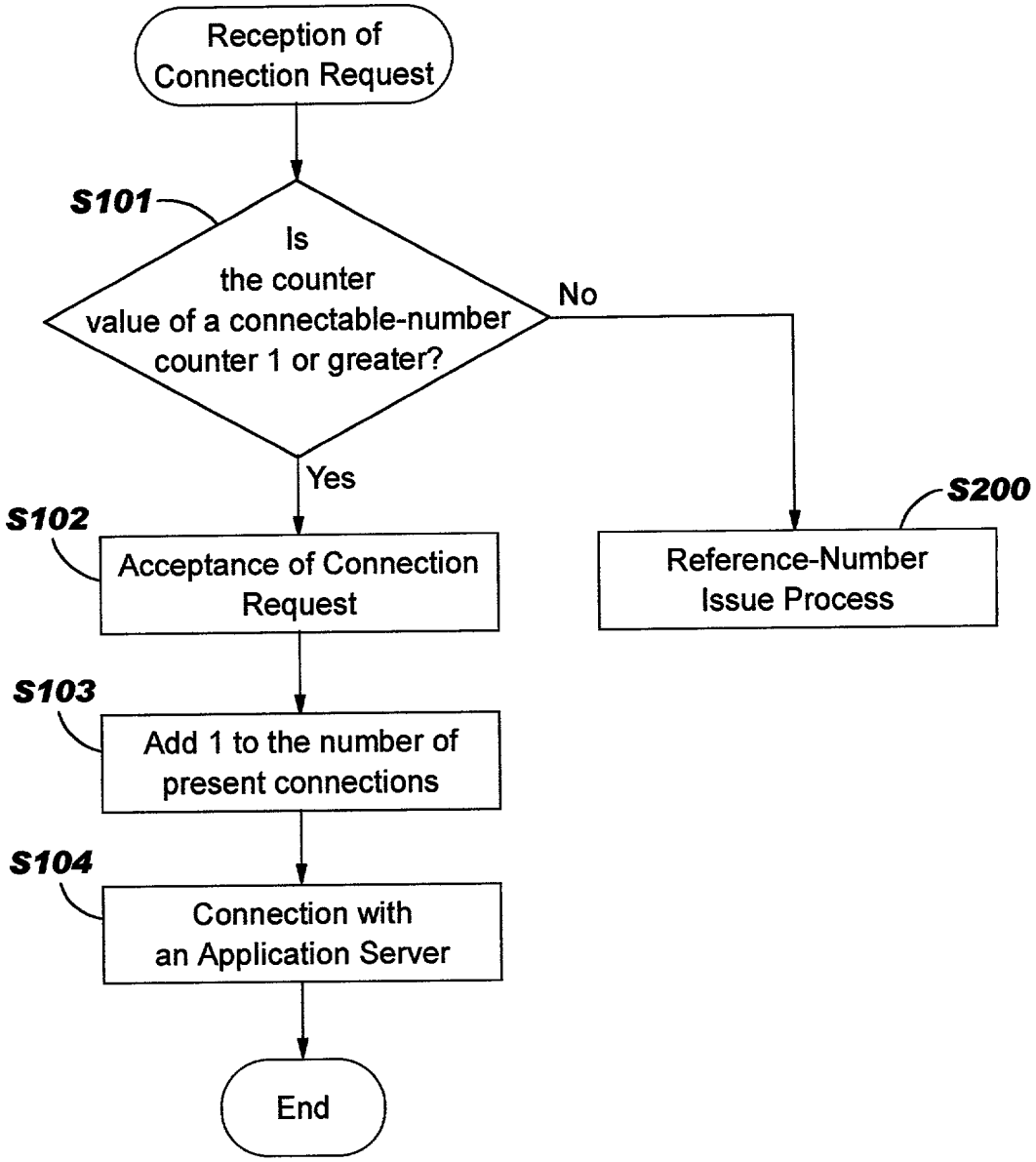

Reception of Connection Request
S101
Is the counter value of a connectable-number counter 1 or greater?
No
Yes
S200
Reference-Number Issue Process
S102
Acceptance of Connection Request
S103
Add 1 to the number of present connections
S104
Connection with an Application Server
End

FIG. 3

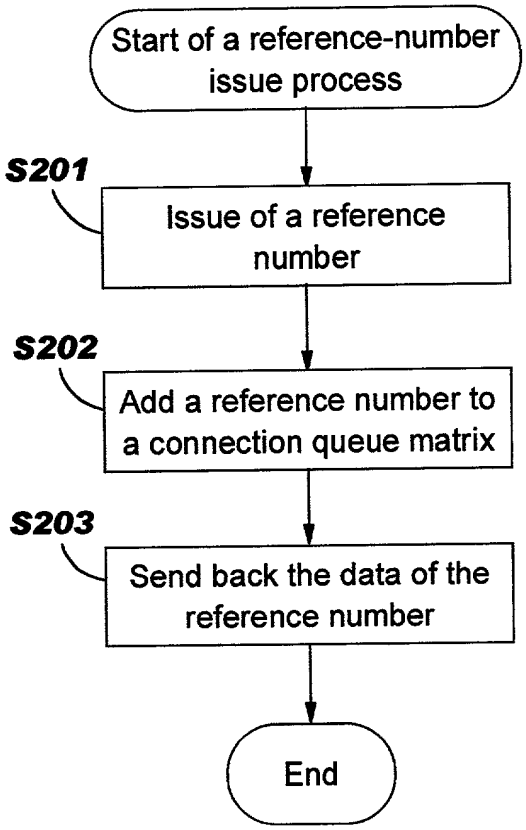

Start of a reference-number issue process
S201
Issue of a reference number
S202
Add a reference number to a connection queue matrix
S203
Send back the data of the reference number
End

FIG. 4

```
<HTML>
<HEAD>
<TITLE>Max user reached</TITLE>
<META http-equiv="Pragma" content="no-cache">
</HEAD>
<SCRIPT LANGUAGE = JAVASCRIPT>
function requestConnect 0 {                                   (B)
  u = "/servlet/ConnectServlet?cmd=connect"
  location replace(u)
}
function cancelRequest 0 {                                    (D)
  u = "/servlet/ConnectServlet?cmd=cancel"
  location replace(u)
}
</SCRIPT>
<BODY bgcolor="#ccccff" onload=setTimeout('requestConnect 0', $Interval)>   (A)
<CENTER>
<H1>
<TABLE>
<TR><TD><H3>
Being crowded now.
<BR><BR>
</TD></TR>
<TR><TD><H4>
You can log in in the order of "$Order" of "$QueueSize" people. <BR>
</TD></TR>
<TR><TD><H4>
Your reference number is "$DTX_Ticket" <BR>
</TD></TR>
<BR>
</H2></TABLE>
</H1>
<FORM>
<INPUT type="button" name="button1" value="Cancel" onClick=cancelRequest 0   (C)
</FORM>
</CENTER>
</BODY>
</HTML>
```

FIG. 5

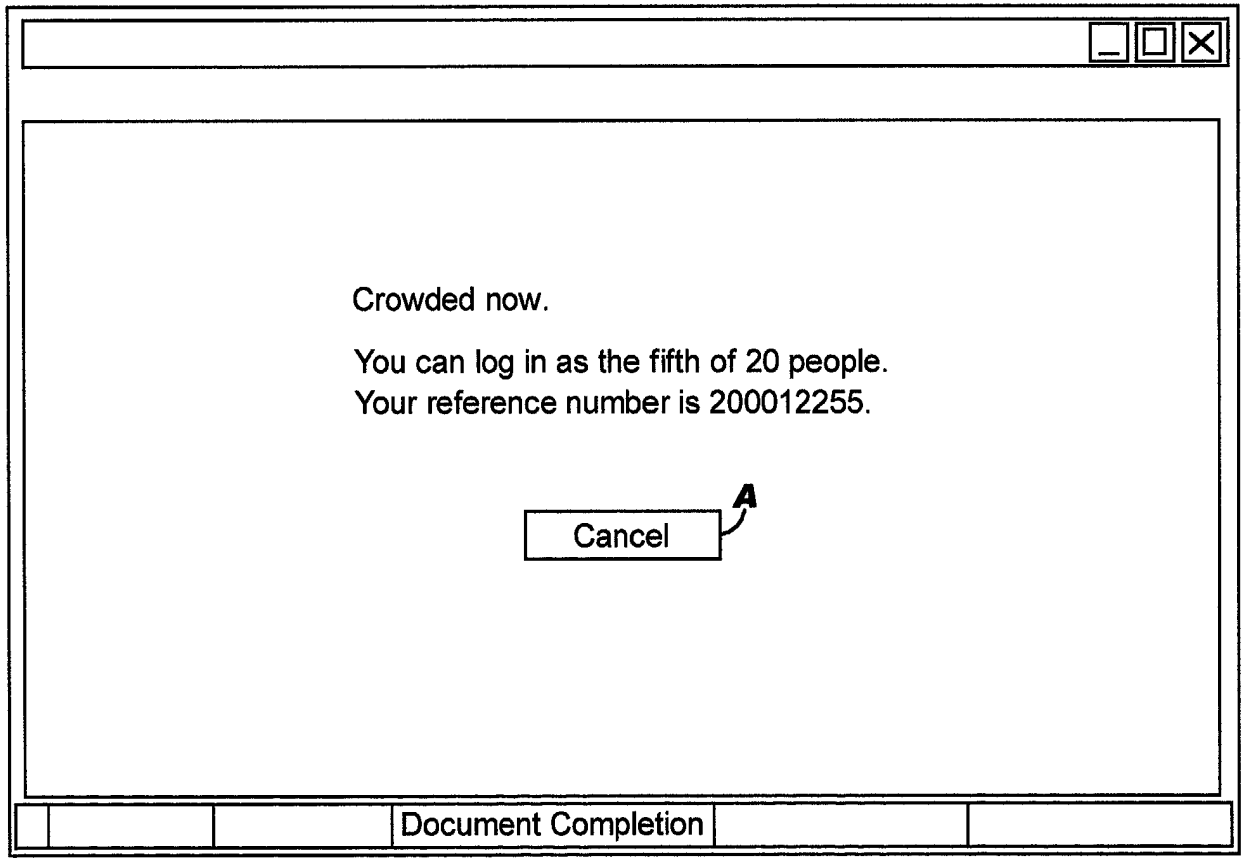

Crowded now.
You can log in as the fifth of 20 people.
Your reference number is 200012255.
Cancel
A
Document Completion

FIG. 6

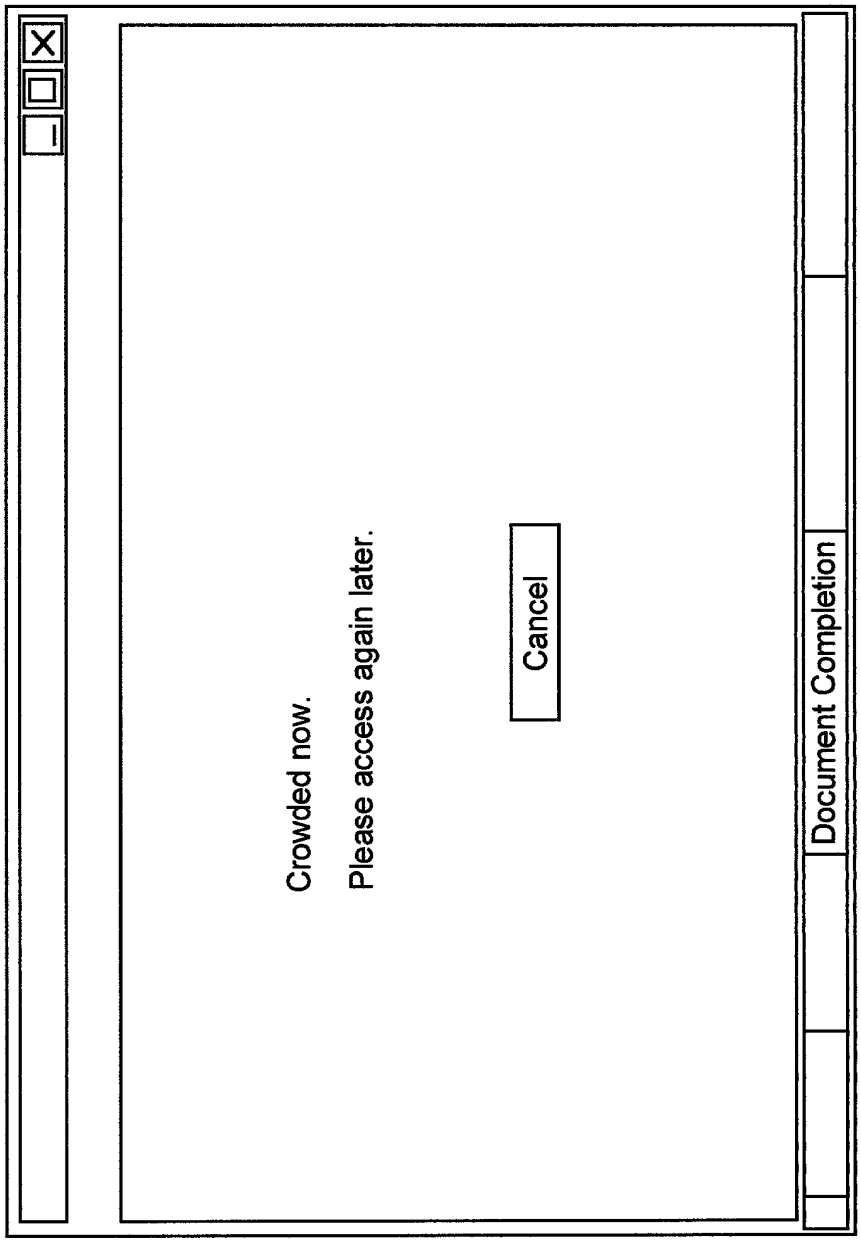

Crowded now.
Please access again later.
Cancel
Document Completion

FIG. 7

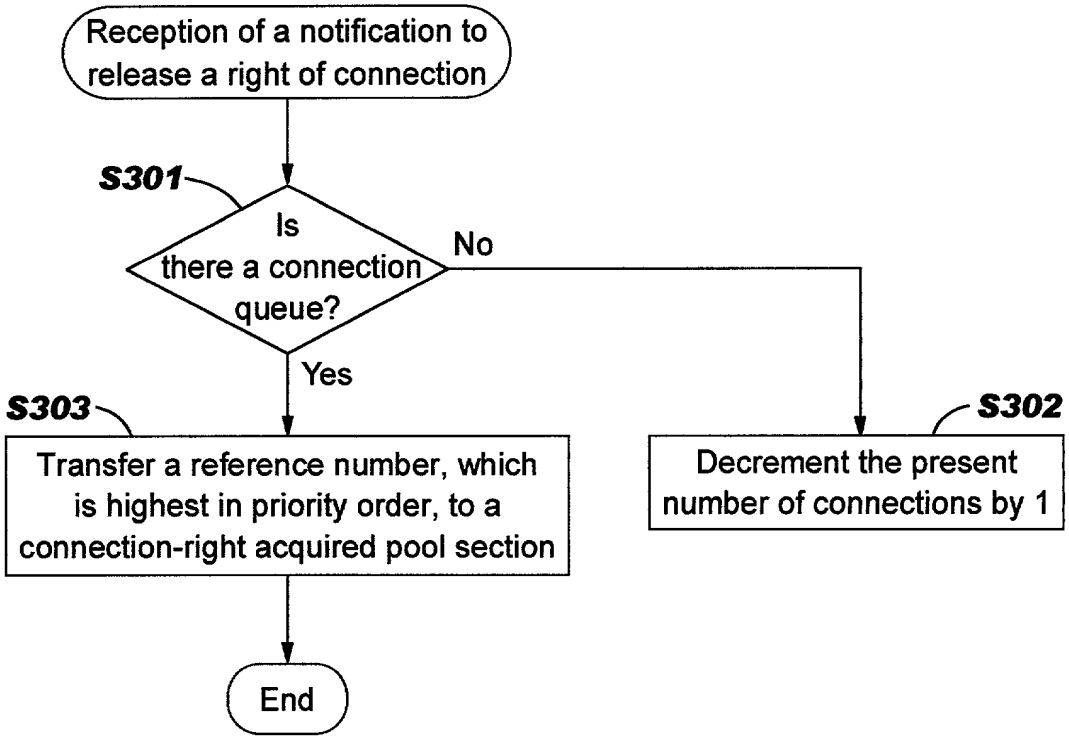

Reception of a notification to release a right of connection
S301
Is there a connection queue?
No
Yes
S303
Transfer a reference number, which is highest in priority order, to a connection-right acquired pool section
S302
Decrement the present number of connections by 1
End

FIG. 8

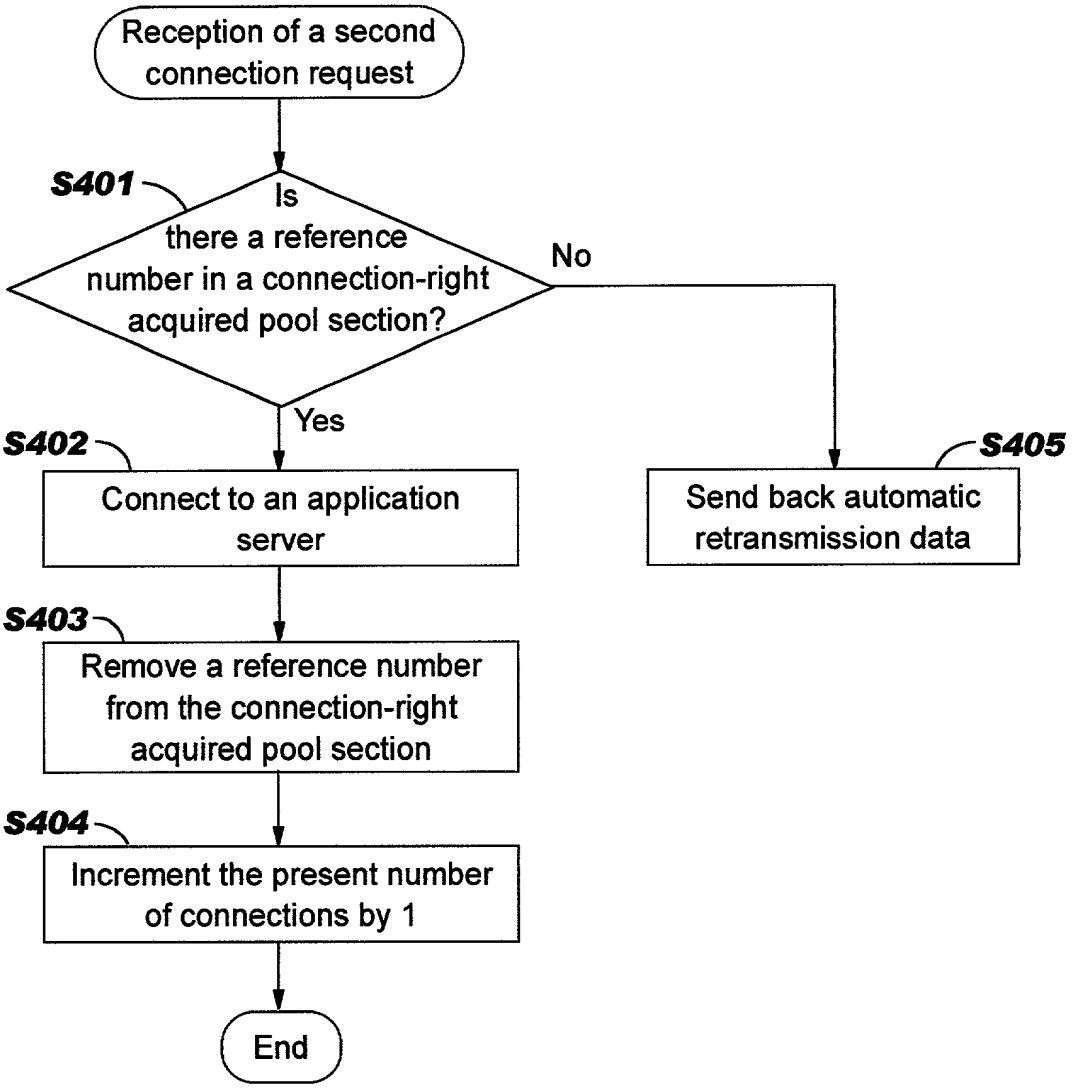
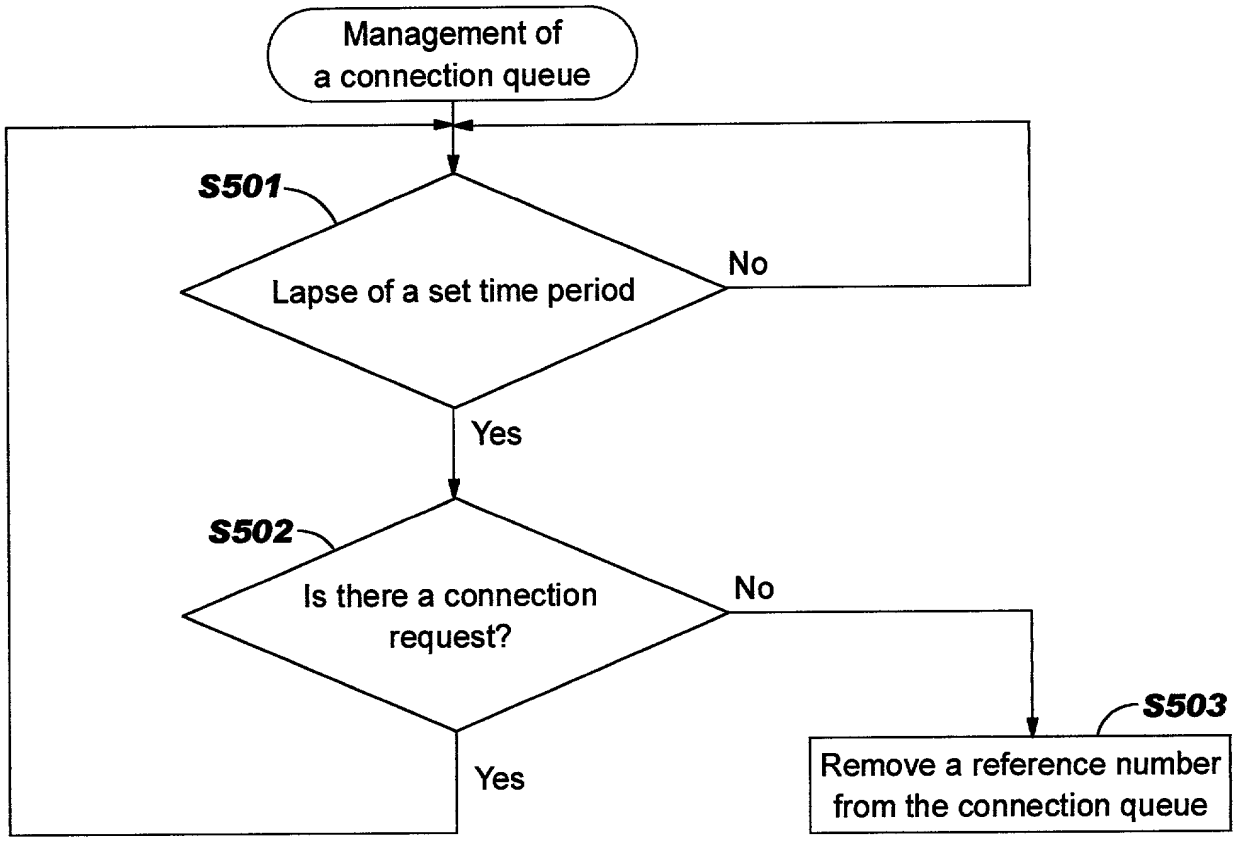

Reception of a second connection request
S401
Is there a reference number in a connection-right acquired pool section?
No
Yes
S402
Connect to an application server
S403
Remove a reference number from the connection-right acquired pool section
S404
Increment the present number of connections by 1
End
S405
Send back automatic retransmission data

FIG. 9


Management of a connection queue
S501
Lapse of a set time period
No
Yes
S502
Is there a connection request?
No
Yes
S503
Remove a reference number from the connection queue

2002-10-17 16:25:00.0

FIG. 10

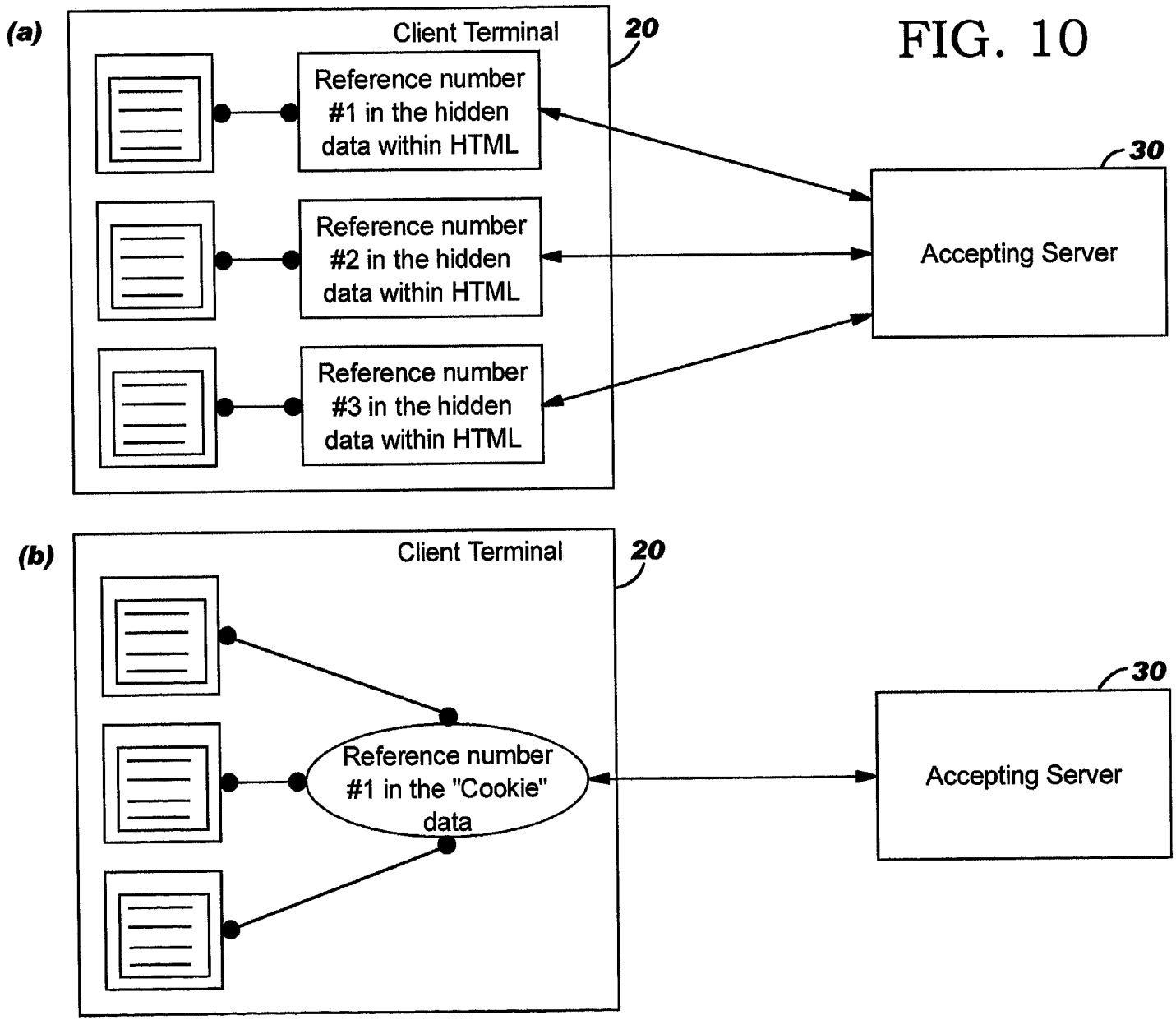


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FIG. 11

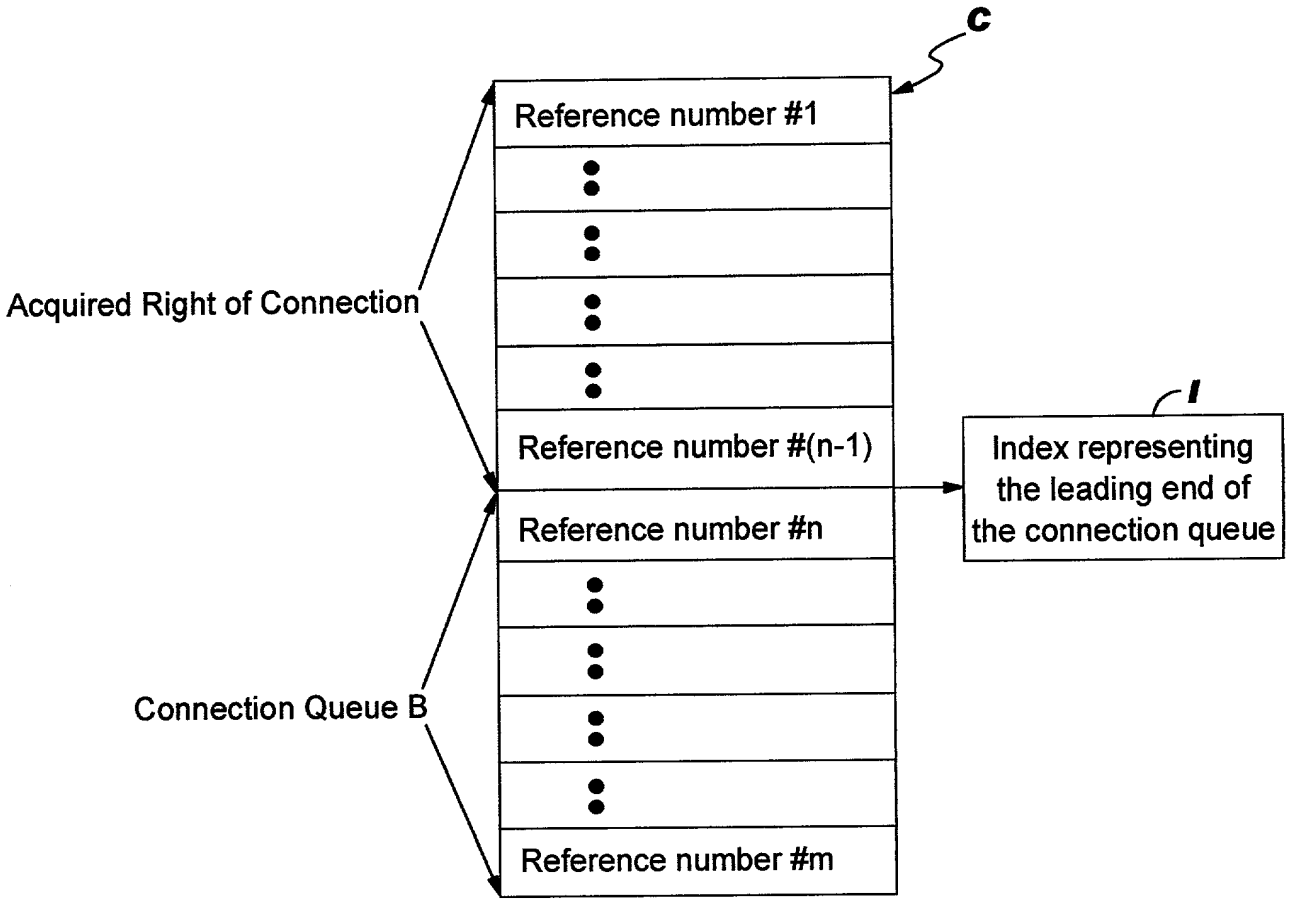
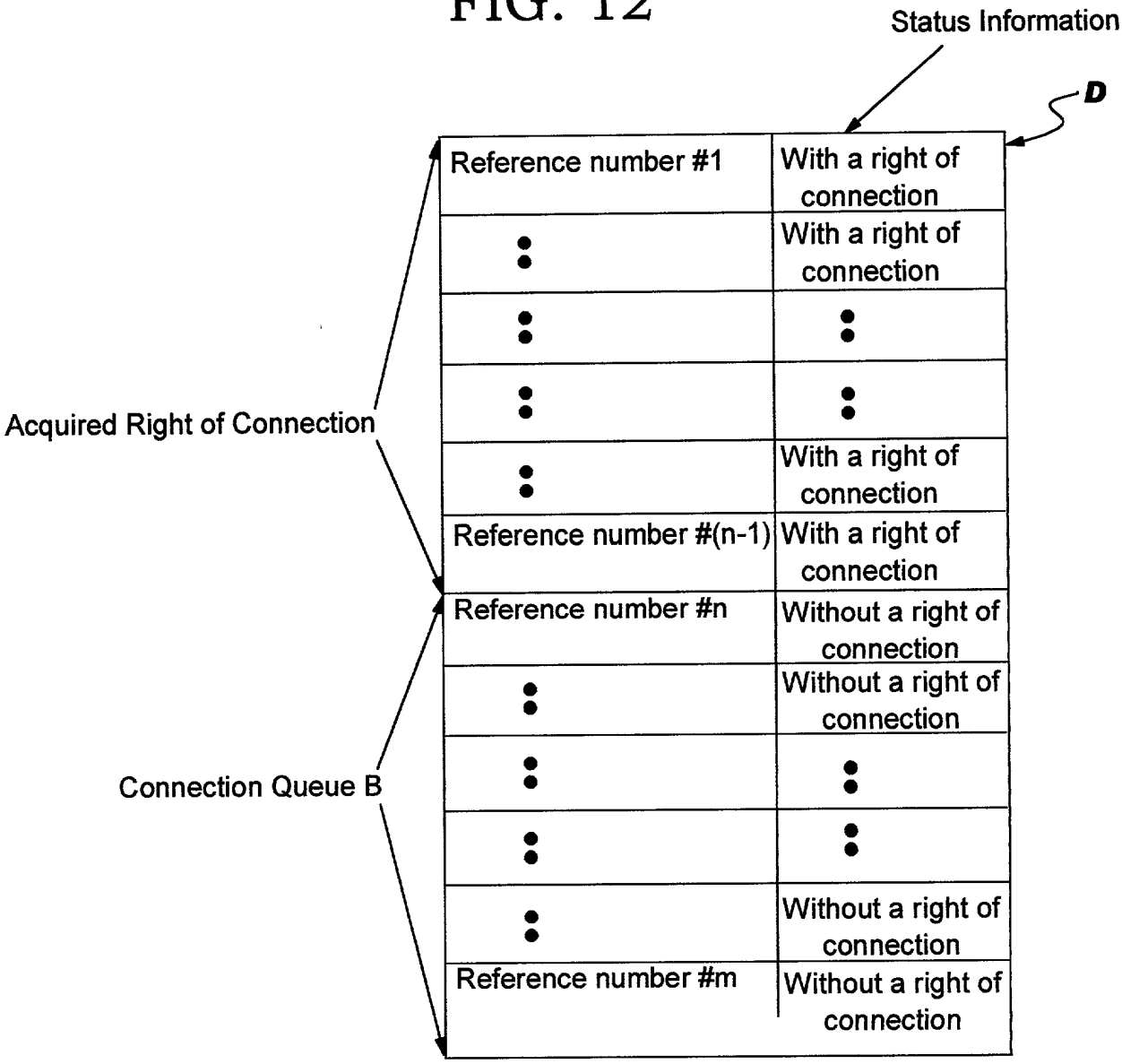

C
Reference number #1
Acquired Right of Connection
I
Reference number #(n-1)
Index representing the leading end of the connection queue
Reference number #n
Connection Queue B
Reference number #m

FIG. 12


Status Information
D
Acquired Right of Connection
Connection Queue B
Reference number #1
With a right of connection
With a right of connection
With a right of connection
Reference number #(n-1)
With a right of connection
Reference number #n
Without a right of connection
Without a right of connection
Without a right of connection
Reference number #m
Without a right of connection